



2010 Sustainability Achievement Report

City of Santa Barbara



It is our pleasure to present the 2010 City of Santa Barbara Sustainability Achievement Report.

This last year, responding effectively to our nation's economic downturn has been everyone's top priority. In every department, we focused on how to provide the essential services City residents expect and deserve with fewer resources. Our work here continues.

Every day, the City makes policy and operational decisions that can lead to both cost savings and increased sustainable practices. We must be both fiscally sound and environmentally strong. These two important goals are not mutually exclusive. The 2010 Sustainability Report highlights some great achievements in this regard.

Here's one small example. Last year, the City of Santa Barbara saved over \$150,000 by conducting energy retrofits in various municipal

buildings. That savings can be used to bridge our budget gap, save jobs, ensure funding for programs and services, or a combination of them all.

While this report highlights major City achievements, it also provides you with useful information that can save you energy and money. We hope to encourage residents and business owners alike to participate in the many options available that can help increase your bottom line, while simultaneously reducing your energy output, conserving water, and diverting more trash away from the landfill.

Looking towards the future, we need to connect with other regional governmental leaders and the community where mutual interests intersect. Issues related to energy efficiency, trash reduction, clean air and water, or green jobs creation do not stop at the City's borders, and we acknowledge that we must work collectively as a region on all these important issues in order to achieve success.

Finally, none of the accomplishments listed here would have been possible without the expertise and enthusiasm of the City's Green Team. Employees from every department are active in creating a fiscally sound and environmentally strong City. We thank their efforts, leadership and hard work.

Enjoy the report.

Mayor Helene Schneider
& Sustainability Council Committee Chair
Das Williams



Photo: Damian Gadal

SUSTAINABILITY EFFORTS AT A GLANCE

3,173,000

pounds of foodscrap diverted
from the landfill

83,719

native plants installed through
habitat restoration efforts

3,000

feet of sewer lateral repaired annually

700

certified green gardeners

515

home water check-ups
conducted annually

98%

park acres maintained without
toxic pesticides

70%

waste diverted from the landfill

89

award-winning solar energy projects

43

miles of bikeways

11%

reduction in emissions from City
operations from 1990 levels

3

LEED certified City buildings

CITY OPERATIONS

The culture of the City organization embraces sustainability – our employees, our buildings, and our values.

We have integrated environmentally sustainable goals in the management and operation of all City departments. Our aim is to provide services to the community and conduct daily business in a sustainable manner where we generate less waste, use less energy and fuel, and protect our natural resources.

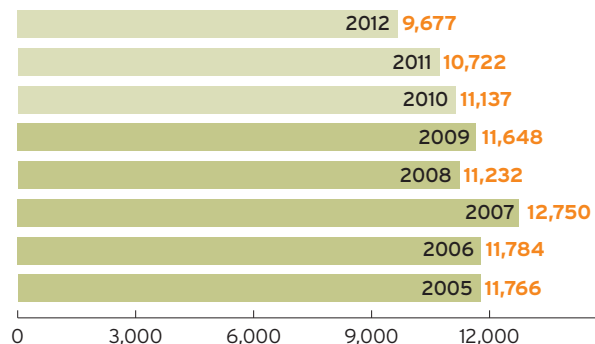
GREEN BUILDINGS

- **Installed the largest solar energy project** in the City of Santa Barbara at the City's Corporate Yard, generating 87% of the electricity needed for downtown Community Development, Public Works, and Parks operations. This project was completed at no cost to the City through a power purchase agreement.
- **Achieved green building certification** for three City facilities: **Community Development and Public Works Offices** (LEED Platinum), **Fire Station Headquarters and Emergency Operations Center** (LEED Gold), and **Airport Rental Car Facility** (LEED Gold)
- **Completed energy retrofits in City facilities** with the help of rebates wherever building maintenance projects were planned, resulting in an annual savings of over \$150,000
- **Installed solar thermal water heating systems** in three Harbor Marina restrooms, reducing natural gas consumption by 50%
- **Powered the entire traffic signal system** with Light Emitting Diode (LED) lighting
- **Used fresh air to cool buildings** to reduce energy demand in some facilities

GREEN PARKS

- **Maintained 98% of park acres** as green parkland without the use of toxic pesticides
- **Planted 300 street and park trees** and maintained an urban forest of 33,260 trees
- **Completed an inventory** of street trees and trees in developed parks to understand the quantity and type of trees that comprise the urban forest

EMISSIONS FROM CITY OPERATIONS (Metric Tons, CO₂ Equivalent)



Emissions from City operations are 11% lower than 1990 levels, surpassing the Kyoto Protocol target.



GREEN FLEET

- **Increased City use of alternative fuel** and hybrid vehicles with 39% of the City's vehicle fleet running on alternative fuels or technology
- **Maintained a fleet of 115 vehicles** running on B20 biodiesel, 42 hybrid vehicles, 5 electric vehicles, 8 compressed natural gas (CNG) vehicles, 2 liquid petroleum vehicles and 19 vehicles capable of using ethanol
- **Decreased fuel use** for City operations by 5% due to fleet policies
- **Reduced the vehicle fleet** by 4 cars by implementing a Vehicle Pool Car Program that encourages vehicle sharing
- **Initiated driver education training** to improve fuel efficient driving and lower vehicle maintenance and repair costs

1. Corporate Yard Solar Project, generates 87% of facility electricity demands

2. Community Development/ Public Works Offices at 630 Garden Street, achieved LEED Platinum certification

3. Fire Station #1, remodel achieved LEED Gold certification

4. Mission Rose Garden, maintained without the use of toxic herbicides

GREEN PURCHASING

- **Conducted zero-waste events** for City-sponsored meetings and events with the help of recyclable or compostable tableware
- **Used 100% post-consumer recycled content paper** for printing and copying needs
- **Purchased products made from recycled materials**, such as playground materials, asphalt for street and sidewalk repair, motor oil, anti-freeze, toner cartridges, cotton rags, and traffic cones
- **Reduced excess packaging** in purchases through negotiation with vendors
- **Purchased computers and printers** that met strict energy criteria
- **Cleaned with Green Seal certified supplies** in most facilities

5. Airport Rental Car Facility, new building achieved LEED Gold certification

6. Harbor, certified California Clean Marina

7. Santa Barbara Golf Club, creek restoration and storm water management project

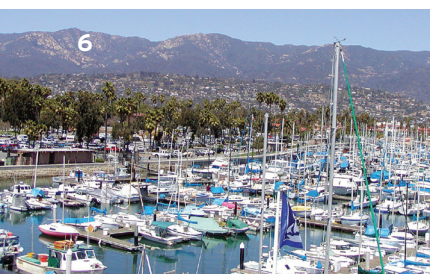
8. Airport Wetlands, largest wetland restoration effort on the South Coast

EMPLOYEE ACTIONS MAKING A DIFFERENCE

- **Reduced drive-alone commutes** to work by 542,000 miles in the last year through the Work Trip Reduction Incentive Program that offers commuter benefits to City employees
- **81% of employees worked flexible schedules** to shift timing of work travel away from the peak commute times before 8:00 a.m. and after 5:00 p.m.
- **Attended meetings** at other City facilities by carpooling, walking, or using a City bicycle
- **Maintained Green Gardener certifications** for 90% of City parks maintenance staff
- **Reused** supplies, recycled materials, and composted foodscrap, often with the help of worms

9. Franklin Community Garden, one of three community gardening facilities

10. Bike Station in Granada Garage, parking facility for downtown cyclists



WASTE PREVENTION

Recycling and composting prevent useful resources from being wasted and reduce the consumption of raw materials and energy needed to process them. With limited landfill space and more limited natural resources, waste materials must be reused or reprocessed into new products whenever possible.

The Santa Barbara School Districts have embraced recycling and composting at all grades with 56% of all school waste being diverted from the landfill through aggressive recycling and composting efforts. Thanks to the efforts of countless school administrators, principals, and teachers, the cafeteria has become the newest learning lab. Students are taught to identify the items in their lunchbox that decompose naturally, can be recycled to other uses, or must be buried in the landfill as trash. Recycling and composting are contagious as children talk to their families and share their good habits from school.

School administrators could not be more pleased with this lesson plan. An early adopter of recycling and composting programs, the Santa Barbara School Districts are saving an estimated \$90,000 per year. The equation is simple. The more each school diverts from the landfill through recycling and composting, the more money saved on the trash bill to spend on other school priorities. With 16 elementary, junior high, and high schools now full participants, the savings are adding up fast. *Top Diverting Schools: Harding Elementary School at 92%, Adelante Charter School/Franklin Elementary School at 75%, Peabody Charter School at 75%, and Adams Elementary School (pictured) at 69%.*



Photo: Amy Steinfeld



THE NEXT GENERATION

“Waste diversion is economically beneficial for schools and it teaches children—future stewards of our planet—the value of making informed choices for a healthy environment by practicing recycling, reusing, and reducing waste.”

— SUPERINTENDENT J. BRIAN SARVIS, ED.D., SANTA BARBARA SCHOOL DISTRICTS



365

days of disposable coffee cups that
could be replaced with 1 reusable mug

90%

trash that goes to the landfill considered
recyclable or compostable

4

pounds of trash thrown away
each day by an average person

7

trees used by an average person each
year for paper, wood, and other products

ACHIEVEMENTS

- **Achieved 70% landfill diversion rate** for all waste through aggressive recycling and reuse programs
 - **Implemented a Foodscraps Composting Program** for 105 businesses with participation from Santa Barbara and Hope School Districts, Santa Barbara City College, Cottage Hospital, hotels, and restaurants
 - **Implemented a Business Recycling Program** that lowers recycling and composting rates to help businesses transition away from standard trash service and cut costs
 - **Collected 182,525 pounds of hazardous materials**, more than double collection efforts from three years ago
 - **Launched the Where's Your Bag Campaign** with Santa Barbara Channelkeeper, Choose to Reuse, California Grocery Association, Tri-County Produce and grocery stores to encourage the use of reusable bags when making purchases
 - **Collected 203,375 pounds of electronic devices** through community events, ensuring proper disposal of televisions, computers, stereos, and other appliances
 - **Recycled 3,300 gallons of waste oil** at the Harbor
 - **Passed an Unscheduled Collection Permit Ordinance** that mandates the recycling of construction and demolition debris, as well as other waste materials
-

“Our whole kitchen staff understands the value of composting foodscraps. It's not complicated. It's as easy as having the bins in place and taking the time to put the waste in the right bin.”

— KIRK DELONG, FESS PARKER'S DOUBLETREE RESORT EXECUTIVE CHEF

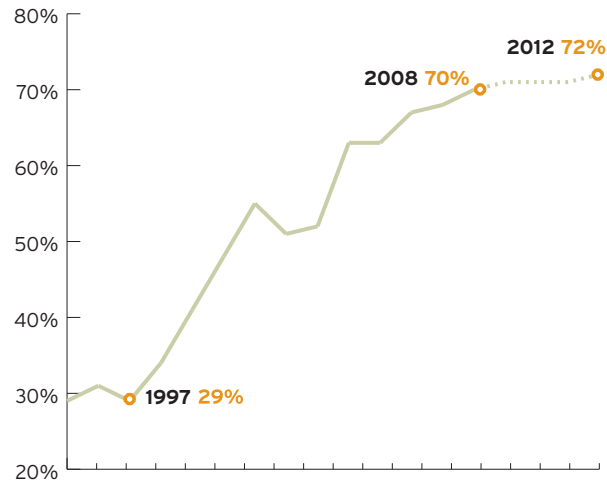
DID YOU KNOW?

The average person goes through 500 plastic bags every year.
Remember to carry a reusable bag when shopping.

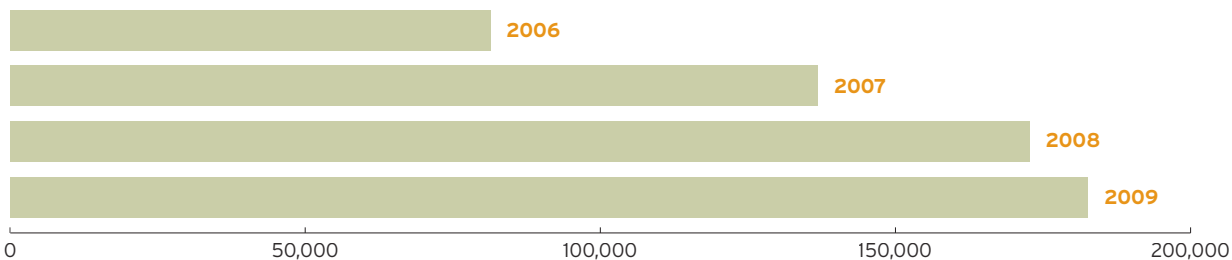
PUT YOUR FOODSCRAPS TO USE Learn to Compost at Home

- Find a small, sealed foodscraps bucket or pail to place in the kitchen.
- Dump unwanted foodscraps in the bucket after each meal.
- Take collected foodscraps to a larger outdoor bin or pile at the day's end to decompose and monitor the composting process.
- Use the decayed material as a soil amendment in your garden.
- Consider vermicomposting with worms to dramatically speed up the process or if you don't have space for a compost pile.

WASTE DIVERTED FROM THE LANDFILL



HAZARDOUS MATERIALS COLLECTED FOR PROPER DISPOSAL (pounds)



vermicompost: v. use of worms to naturally decompose leftover foodscraps and yard wastes, creating nutrient-rich, organic material superior to synthetic fertilizers

SWITCH TO RECYCLING AND COMPOSTING And Lower Your Trash Bill

TYPICAL RESTAURANT COLLECTION	WASTE DIVERSION	ESTIMATED MONTHLY BILL
Trash Collection Only	0%	\$475
Recycling, Composting, and Trash Collection	67%	\$200
YOU SAVE		\$3,300/yr

TIPS

- ☒ Buy and serve appropriate food portions to prevent food waste.
- ☒ Print double-sided documents to cut your paper use in half.
- ☒ Maintain and repair durable items.
- ☒ Purchase products made from recycled content and items that can be recycled or composted.
- ☒ Drop off unused medications at designated disposal centers.

 Learn how to recycle, compost, and safely dispose of electronics and hazardous materials by visiting: www.SBRecycles.com

ENERGY MANAGEMENT

Conserving energy, generating renewable energy, and using alternative fuels can help reduce the reliance on fossil fuels that contribute to pollution and global climate change.

A quick tour of the Shoreline Cafe could convince anyone how easy it is to save energy. Owner Steve Marsh has taken advantage of every opportunity to turn his small restaurant on Leadbetter Beach into the ultimate green building. As a result of his efforts, Marsh estimates that he is now saving up to \$15,000 a year.

Marsh replaced the standard overhead outdoor heaters with a forced air heating system, reducing natural gas use by 65%. Customers enjoy the heat that naturally rises from the floorboards of the outdoor patio. Outdoor light fixtures were also converted to compact fluorescent bulbs, cutting bulb wattage by 80%.

No kitchen appliance has gone unnoticed. The electric griddle was converted to a gas system, significantly reducing the restaurant's electric bill. The freezer and refrigerator were upgraded to the most energy-efficient models. Large equipment such as the fryer and cheese melter that could serve a busy restaurant were replaced with a few, smaller units to allow staff to scale up the use of equipment as the need arose.

One of the first businesses to receive a Green Business certification in Santa Barbara, the Shoreline Cafe is leading the way in not only energy, but recycling and conserving water as well. *Steve's next projects: installing a tankless water heater, upgrading to an energy-efficient dishwasher, and replacing the kitchen lighting.*



Photo: Damian Gadal



THE BOTTOM LINE

“If you can save \$300 a month by greening your business, do it.
At a minimum, you offset the rising cost of operating a business.”

— STEVE MARSH, SHORELINE CAFE OWNER



0

emissions generated by
riding a bike

15%

household energy used
for heating water

19%

electricity in California devoted to
moving water to communities

1985

homes built before this year will see
significant savings from energy upgrades

ACHIEVEMENTS

- **Awarded 89 solar design awards** to residents and businesses for implementation of solar energy projects that were aesthetically well-integrated into a building design
 - **Approved the City's participation in the emPowerSBC Program**, a countywide municipal financing program that will allow property owners to assess themselves for energy retrofits, solar installations, and water conservation projects, pending federal approval
 - **Became the first city in the country to adopt the Architecture 2030 Challenge**, a nationwide movement to reduce building energy use in new construction and major renovations
 - **Designed and initiated construction** of over 100 pedestrian access ramps to improve sidewalk connections for pedestrians
 - **Increased the frequency of bus routes** with the highest ridership through financial contributions to MTD
 - **Installed cameras at 36 signalized intersections** to improve detection of vehicles and bicycles
 - **Completed the East Beach and West Beach Pedestrian Improvement Projects** to enhance beach access and the pedestrian experience along the waterfront
 - **Completed the Loma Alta Sidewalk Project**, increasing pedestrian safety and access from the Lower Westside to the Mesa, Santa Barbara City College, and the beach
 - **15 out of 16 Santa Barbara schools** actively participated in Safe Routes to School activities
 - **37% of residents commuted to work** by bicycling, walking, public transit, commuter shuttle, vanpooling, or carpooling, in comparison to 27% statewide
 - **Maintained extensive bikeway and parking network** to allow bicyclists many routes to reach their destination
-

“You can green your house in baby steps or giant steps.
All the tools are available and affordable.”

— JOE CAMPANELLI, SANTA BARBARA CONTRACTORS ASSOCIATION

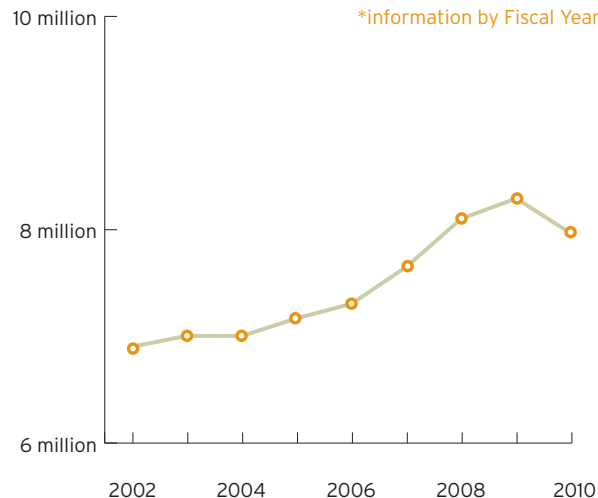
DID YOU KNOW?

It is estimated that up to 20% of your home electricity is used by appliances and devices that are turned off. These “phantom” users include televisions, stereos, computers, and kitchen appliances. Unplug items when not in use or use a power strip to cut all power. Remember to unplug phone and battery chargers when not in use.

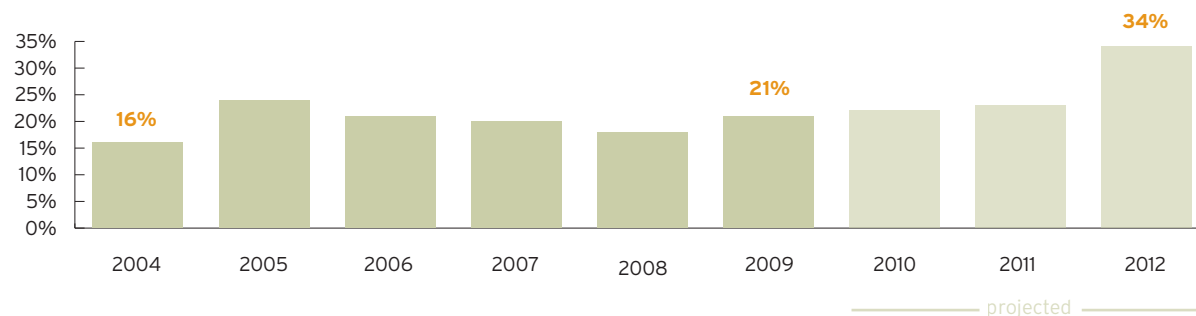
QUICK AND LOW COST WAYS to Heat and Cool Your Home

- In the winter, keep window drapes and shades open to let sunlight in and heat your home.
- During the summer, close blinds and drapes on south- and west-facing windows on bright days to cool your home.
- Set your thermostat as low as comfortable in the winter and as high as comfortable in the summer.
- Program your thermostat to reduce unnecessary heating and cooling during work or evening hours.

MTD BUS RIDERSHIP



USE OF RENEWABLE ENERGY IN CITY FACILITIES (% of total energy used)



Leadership in Energy and Environmental Design (LEED): green building certification system, providing third-party verification that a building was designed and built to improve performance in energy savings, water efficiency, emissions reduction, and indoor environmental quality.

LOWER ENERGY USE And Cut Your Electric Bill

	ANNUAL USE	ESTIMATED ELECTRIC BILL
Inefficient Home	8,500 kWh	\$1,200
Energy-Wise Home	4,250 kWh	\$600
YOU SAVE	4,250 kWh	\$600/yr

TIPS

- ✓ Complete a free online energy survey through Southern California Edison and identify where your home or business is wasting energy.
- ✓ Check your lighting needs, adjust the number and wattage of bulbs, and consider using occupancy sensors, timers, and dimming.
- ✓ Wash only full loads of laundry and dishes, use cold water, and air dry whenever possible.
- ✓ Avoid speeding, rapid acceleration, and hard braking to improve gas mileage.



To learn more about commuting by bus, vanpool, carpool, or bike, visit: www.TrafficSolutions.info

WATER QUALITY, CONSERVATION AND HABITAT RESTORATION

Protecting our environment requires a commitment to healthy watersheds that convey clean water to the ocean, restoration of creeks and wetlands, and the maintenance of the urban forest that grows throughout the community. Since rainfall is not always plentiful, it is critical that water resources are used efficiently to stretch our water supply in case of drought.

Santa Barbara resident Jo Landis Shields has created a lush and vibrant garden with the help of many water-wise plants. This ultra-low maintenance garden thrives with minimal watering.

Several types of cactus, agave, flax, and aloe give the garden texture and a dreamlike quality. Stone pavers and gravel create pathways through the garden, surrounded by decorative borders of succulent plants. Plants were selected for all sides of the home based on the sunlight exposure. A drip irrigation system and the use of decomposed granite lock in moisture under the soil. The drought-tolerant landscaping beautifully complements the Spanish Revival architecture. *Jo's favorite water-wise plants: Palo Verde tree, Cistus flowering shrub, Dymondia margaretae ground cover, Agave, Sedum, Aloe, and Euphorbia cactus.*





THE WATER-WISE GARDEN

“Sustainable living is a very important idea to me and I feel it should be integrated into the basis of all our living standards. My garden is not just about water conservation, but creating a beautiful, natural environment for pure enjoyment, while protecting a natural resource.” — JO LANDIS SHIELDS, SANTA BARBARA RESIDENT



5,200

gallons of water saved in a year with
a high efficiency clothes washer

4,839

native plant species, most accustomed
to California's semi-arid climate

\$0

cost of a home water check-up

ACHIEVEMENTS

- **Awarded 51 rebates** for efficient irrigation equipment, water-wise landscaping, and mulch through the Smart Landscape Rebate Program
 - **Amended Landscape Design Standards** for private development, requiring projects to be designed with the most water-conserving plants and irrigation systems
 - **Developed Graywater Permitting Guidelines** and held workshops to help residents design graywater systems to easily recycle household wastewater
 - **Created a searchable Internet database** to help residents select water-wise plants that fit their landscaping needs
 - **Expanded the delivery of recycled water** to Dwight Murphy Field restrooms and West Beach landscaping for a total of 52 recycled water use sites, reducing the use of potable water resources
 - **Managed the Sewer Lateral Inspection Program** to encourage the replacement of 1,076 private sewer laterals to prevent sewage spills that can contaminate creeks and the ocean
 - **Restored 37 acres of Goleta Slough** native habitat as part of the Airport Runway Safety Area Project for a total of 75 acres, representing the South Coast's largest wetland restoration project
 - **Completed the Upper Las Positas Creek Restoration and Storm Water Management Project** to treat storm water runoff from residential neighborhoods, Adams Elementary School, the golf course, and surrounding streets by constructing bioswales, wetlands, and large detention basins landscaped with native plants
 - **Completed a Storm Water Management Program** to prevent urban runoff and water pollution
 - **Investigated storm drains** for sources of human waste with the help of a sewage-sniffing dog, the first dog in the world scent-trained to track waste sources in storm drains
 - **Maintained Clean Marina certification** at the Harbor, enforcing no-discharge rules and reducing toxic materials from boating equipment and supplies
-

"We're proudly committed to the cleanliness and quality of our ocean water. This is a combined effort from all facets of our harbor community, from the fishermen to the live-aboards, to our harbor yachting guests that allow this fragile ecosystem to thrive." — SKIP ABED, HARBOR MERCHANTS ASSOCIATION

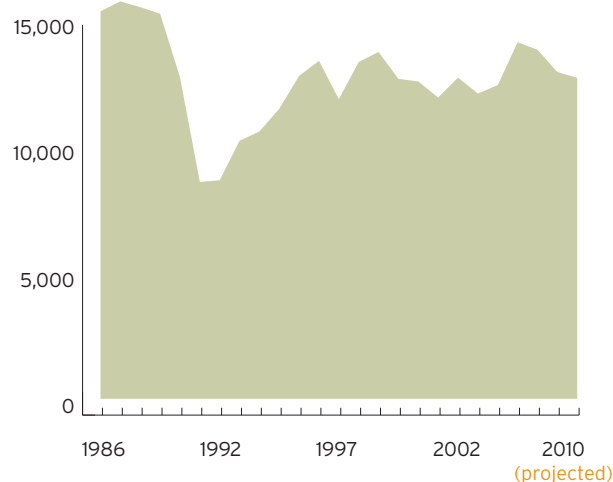
DID YOU KNOW?

In a typical home, almost half of the water is used outdoors for irrigation. Reduce lawn size and landscape with water-wise plants. Install smart irrigation devices and rain shut-off sensors to save water outdoors.

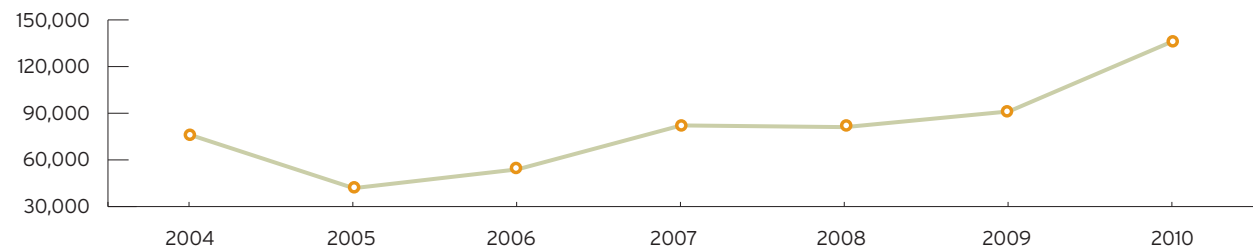
MANAGE PESTS AND WEEDS NATURALLY

- **Select** plants that are well-suited to Santa Barbara, resistant to pests and disease, and attractive to beneficial insects.
- **Introduce** beneficial insects in your garden that eat aphids and mites.
- **Cultivate** healthy soil through tilling to loosen the soil.
- **Use** mulch, compost, worm castings, and weed fabric to control weeds and eliminate pests.

TOTAL WATER SYSTEM PRODUCTION (acre-feet)



DEBRIS COLLECTED FROM CREEKS AND WATERWAYS (pounds)



graywater: n. untreated, household wastewater that does not contain human wastes, such as water from bathtubs, showers, washbasins, clothes washers, and laundry tubs, that can be used to irrigate lawns and gardens.

LOWER WATER USE And Cut Your Water Bill

HOME WATER USE	MONTHLY WATER USE	ESTIMATED WATER BILL
Inefficient Home	12,700 gal	\$84.00
Water-Wise Home	9,000 gal	\$69.50
YOU SAVE	3,700 gal	\$174.00/yr

TIPS

- ☒ Upgrade to new, water-efficient plumbing fixtures and appliances to conserve water—rebates are available.
- ☒ Use a commercial car wash or wash your car on a lawn or other unpaved surface to prevent wash water from reaching the street.
- ☒ Pick up after your dog to prevent bacteria and viruses from reaching waterways.
- ☒ Inspect and maintain your car regularly to prevent leakage of oil, antifreeze, and other toxic fluids.



To learn more conservation tips for indoor and outdoor water use, visit: www.SBWater.org

OUR COLLABORATIVE EFFORTS



The **South County Energy Efficiency Partnership** is a collaborative effort between the cities of Santa Barbara, Carpinteria, and Goleta, County of Santa Barbara, and Southern California Edison. The Partnership offers rebates, training, and exchange events to encourage residents and businesses to complete energy retrofits and replace old refrigerators, freezers, office lighting and decorative holiday lighting. The Partnership provides tips and resources to begin saving energy and money.

www.SCEEP.org



A successful business is dependent on a healthy environment. The **Green Business Program of Santa Barbara County** offers incentives and assistance to encourage businesses to take voluntary actions to protect, preserve, and improve the environment beyond what current laws require. Businesses are certified by adopting resource conservation and pollution prevention measures. To support local green businesses, look for the Green Business logo.

www.GreenBizSBC.org



The **Where's Your Bag?** campaign educates the public about the negative environmental effects of plastic and paper single-use bags and promotes the use of reusable shopping bags. The City of Santa Barbara, Santa Barbara Channel-keeper, Choose to Reuse, the California Grocers Association, Tri-County Produce and local grocers have joined together to create the campaign.

www.WheresYourBag.com



The City has worked with **Built Green** to provide information, advice, programs and classes on green building processes and materials. Built Green has developed a detailed checklist rating system that can guide hundreds of decisions that are typical in the building process. Visit the Built Green Resource Center at 914 A Santa Barbara Street and learn more about green building strategies, features and products.

www.BuiltGreenSB.org

OUR COMMUNITY PARTNERS





ACKNOWLEDGEMENTS

City Council

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Sustainability Council Committee

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Sustainability Council Committee

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John Bridley
Waterfront Director

Andrew DiMizio
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Irene Macias
Library Director

Karen Ramsdell
Airport Director

Nancy Rapp
Parks and Recreation Director

Bob Samario
Finance Director

Camerino Sanchez
Police Chief

Stephen Wiley
City Attorney

◀ Many thanks to the City's Green Team for their dedication to protecting and enhancing the environment. The Green Team is pictured on City Hall's cool roof that reflects heat and sunlight away from the building, resulting in a lower building temperature. Photo: Brian Slagle

Special Thanks

to Damian Gadal, Brian Slagle, Tony Ruggieri, Cameron Clark, and Tim Roof for photography and graphic support, and Barbara Keyani, Amy Alzina, David Alvarez, Phil Suding, and Cearnal Andrulaitis, LLP for their assistance in the report.

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For more information, visit
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